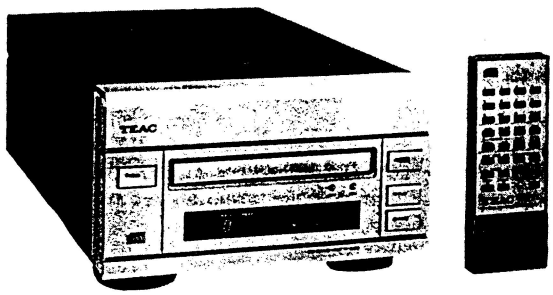
TEAC®



SERVICE MANUAL

P-500

CD DRIVE UNIT

COMPACT disc DIGITAL AUDIO

Effective : JULY, 1989 930475

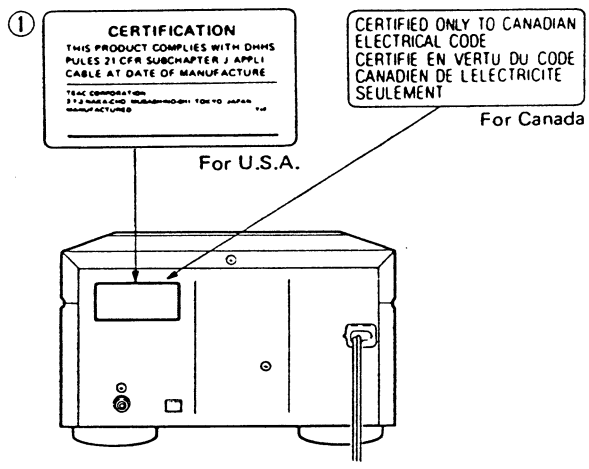
5704044400

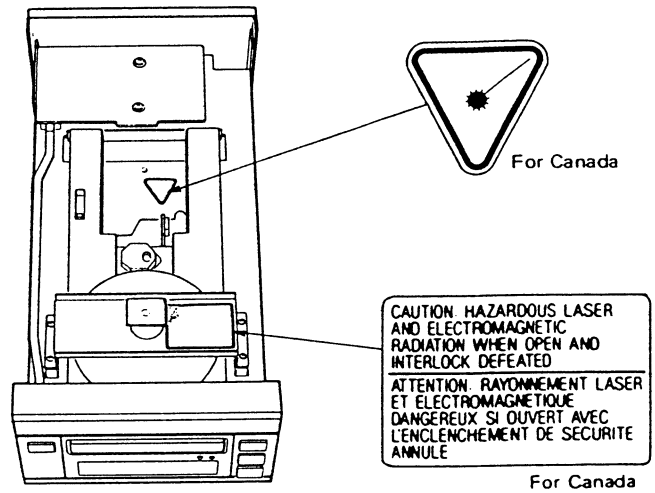
1 SAFETY INFORMATION

This product has been designed and manufactured according to FDA regulations "title 21, CFR, chapter 1, subchapter J, based on the Radiation Control for Health and Safety Act of 1968", and is classified as class 1 laser product. There is not hazardous invisible laser radiation during operation because invisible laser radiation emitted inside of this product is completely confined in the protective housings.
The label required in this regulation is shown ①.

CAUTION

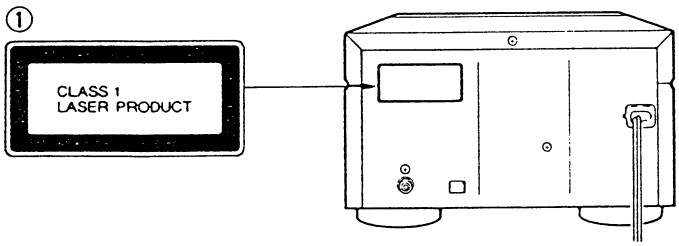
- **If you remove the above-mentioned housings under the operating state of the product, there is a possibility of human access to the invisible laser radiation emitted from the optical pickup.**
  Pay careful attention, not to let the invisible laser beam enter into your eyes.
- **If you find a troubled state of the laser diode, change to the specified new optical pickup.**
- **If you find a troubled state of the safety interlock parts, change to the same type parts described in parts list.**


①
CERTIFICATION
THIS PRODUCT COMPLIES WITH DHHS RULES 21 CFR SUBCHAPTER J APPLICABLE AT DATE OF MANUFACTURE
CERTIFIED ONLY TO CANADIAN ELECTRICAL CODE
CERTIFIE EN VERTU DU CODE CANADIEN DE L'ELECTRICITE SEULEMENT
For Canada
For U.S.A.


For Canada
CAUTION. HAZARDOUS LASER AND ELECTROMAGNETIC RADIATION WHEN OPEN AND INTERLOCK DEFEATED
ATTENTION. RAYONNEMENT LASER ET ELECTROMAGNETIQUE DANGEREUX SI OUVERT AVEC L'ENCLENCHEMENT DE SECURITE ANNULE
For Canada

Optical pickup: Type : KSS-151A
Manufacturer : SONY Corporation
Laser output : 0.2 mW or less on the objective lens
Wavelength : 780 nm ±20 mm

● CAUTION ● ACHTUNG ● OBSERVERA ● ADVARSEL



① THIS LABEL IS ATTACHED TO THE PLACE AS ILLUSTRATED TO INFORM THAT THE APPARATUS CONTAINS A LASER COMPONENT.

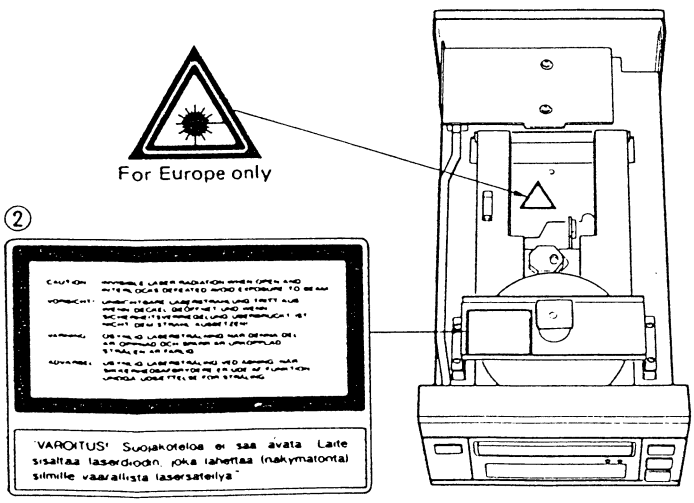
① DIESE AUFKLEBEMARKE IST AN DEM IN DER ABBILDUNG GEZEIGTEN ORT ANGEBRACHT UM DARAUF HINZUWEISEN, DASS IM INNERN DES GERATS EINE LASER-KOMPONENTE BEFINDET.

① PÅSKRIFTEN SITTER PÅ APPARATEN SOM VISAS SOM UPPMANING OM ATT APPARATEN OMFATTAR EN INBYGGD LASERKOMPONENT.

① DETTE MÆRKAT ER ANBRAGT SOM VIST I ILLUSTRATIONEN FOR AT ADVARE BRUGEREN OM AT APPARATET INDEHOLDER EN LASERKOMPONENT.

② DETTE MÆRKAT ER SOM VIST PÅ ILLUSTRATIONEN ANBRAGT PÅ INDERSIDEN AF TOPDÆKSLET FOR AT ADVARE BRUGEREN OM AT YDERLIGERE FREMTRÆNGEN VIL VÆRE FORBUNDET MED FARE FOR AT UDSÆTTE SIG FOR LASERSTRÅLING.

ADVARSEL – BETJENING AF ANDRE KONTROLLER OG REGULATORER ELLER BENYTTELSE AF ANDRE FREMGANGSMÅDER END BESKREVET HERI ER FORBUNDET MED FARE FOR UDSÆTTELSE FOR LASERSTRÅLING.


For Europe only
②
VAROITUS! Suojakoteloa ei saa avata. Laite sisaltaa laserdiodin, joka lahettaa (nakymatonta) silmille vaarallista lasersateilya.

VARNIG: APPARATEN INNEHÅLLER LASER KOMPONENT MED STRÅLNING OVERSTIGANDE KLASS 1

"ADVARSEL: USYNLIG LASERSTRÅLING VED ÅBNING NAR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLING"

"VAROITUS! SUOJAKOTELOA EI SAA AVATA. LAITE SISALTAA LASERDIODIN. JOKA LAHETTAA (NAKYMATONTA) SILMILLE VAARALLISTA LASERSATEILYA".

2 SPECIFICATIONS

仕　様

<Laser Pickup>
Type Object lens drive, optical 3-beam system
Object Lens Drive System 2-dimensional parallel drive
Laser Type AlGaAs semiconductor laser
Wavelength 780 nm
Pickup Drive System Linear-motor drive

<Signal Format>
Sampling Frequency 44.1 kHz
Quantization Bits 16 bits linear/channel
Channel Bit Rate (Transmission Rate) 4.3218 Mb/sec.
Modulation Code EFM (Eight-to-Fourteen Modulation)
Error Correction System CIRC (Cross-Interleave Reed Solomon Code)

<Disc>
Type Compact Disc
Playing Time
Approx. 60 min. for 12 cm (5-inch) disc
Approx. 20 min. for 8 cm (3-inch) disc
Diameter 12 cm (5-inch), 8 cm (3-inch)
Thickness 1.2 mm
Scanning Velocity 1.2 – 1.4 m/sec.
Track Pitch 1.6 μm

<Audio>
Digital Output Level
0.5 Vp-p, 75 ohms (COAXIAL)
–9 dBm (OPTICAL)

<General>
Power Requirements 100/120/220/240 V AC, 50/60 Hz (General export model)
120 V AC, 60 Hz (U.S.A. model)
220 V AC, 50 Hz (Europe model)
Power Consumption
10 watts (U.S.A. model)
11 watts (Europe model)
Dimensions (W x H x D)
225 x 137.5 x 400 mm
(8-7/8" x 5-7/16" x 15-3/4")
Weight 7 kg (15.5 lbs.)
Provided Accessories:
Remote Control Unit (RC-342), Batteries (SUM-3/AA/R6) x 2, Coaxial Cord (for digital connection), AC Power Cord, Lock Key

〈ピックアップ〉

方式	対物レンズ駆動、光学式3ビーム
対物レンズ駆動方式	2次元平行駆動
光源	半導体レーザー
波長	780nm
〈ピックアップ駆動方式〉	リニアモーター駆動

〈信号フォーマット〉

標本化周波数	44.1kHz
量子化ビット数	16ビットリニア/チャンネル
伝送レート	4.3218Mb/sec
変調方式	EFM
エラー訂正方式	CIRC

〈ディスク〉

方式	コンパクトディスク
演奏時間	約60分／約20分
ディスク直径	120mm／80mm
ディスク厚	1.2mm
線速度	1.2～1.4m/sec
トラックピッチ	1.6μm

〈オーディオ〉

出力(デジタル)	0.5Vp-p/75Ω (COAXIAL)× 1
	OPTICAL × 1

〈一般〉

電源	100V AC 50／60Hz
消費電力	10W
●外形寸法(W×H×D)	225×137.5×400mm
●重量	6 kg

〈リモコン RC-342〉

リモコン方式	赤外線パルス方式
電池	DC 3V
	乾電池SUM-3型 2個使用
外形寸法(W・H・D)	60×18×150mm
重量	105g(乾電池含む)

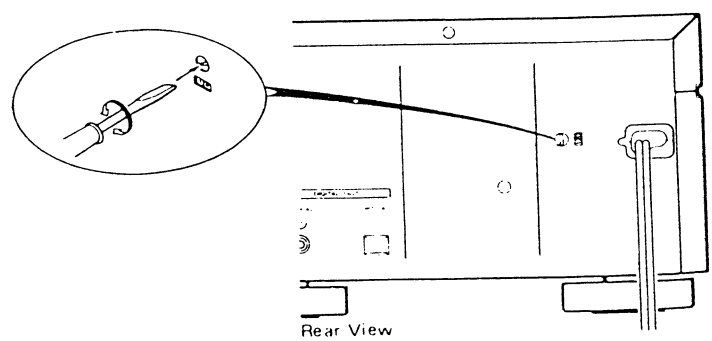
〈付属品〉
- ●リモートコントロール・ユニット(RC-342)× 1
- ●乾電池(単3 SUM-3)×2
- ●同軸コード× 1
- ●ロック・フレート× 1
- ●取扱説明書× 1

■ Voltage Conversion

(For general export models only)

If it is necessary to change the voltage setting of the unit to match your area, proceed as follows:

1. DISCONNECT THE POWER LINE CORD.
2. Using a screwdriver, turn the selector until the required voltage marking appears.



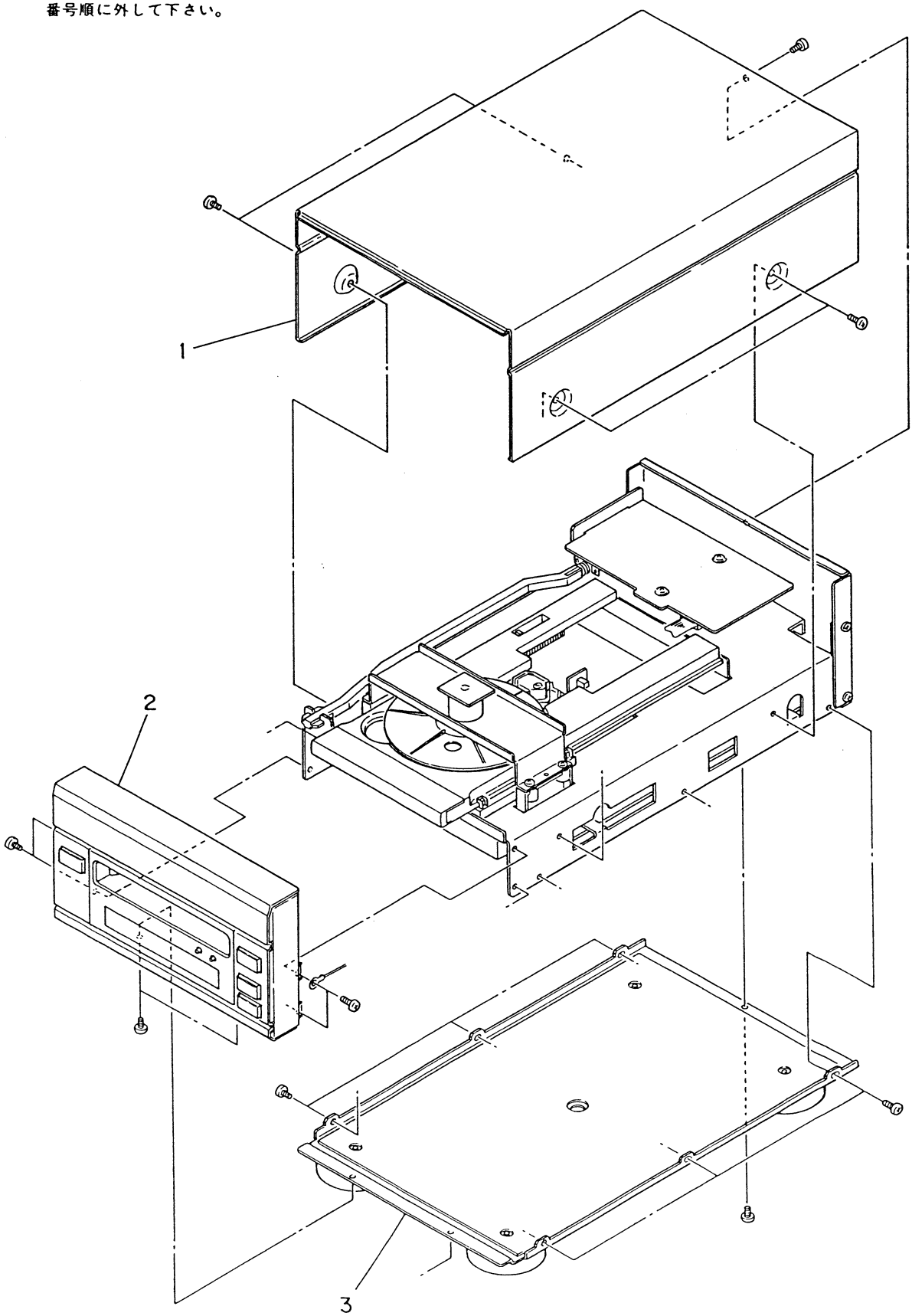
Rear View

3 REMOVAL OF EXTERNAL COMPONENTS

外装部品の外し方

Disassemble in number-order

番号順に外して下さい。



4 ADJUSTMENT AND CHECKS

調整と確認

How to handle the pictup assembly

1. Replacement of the pickup assembly

- Before removing the pickup assembly (and the flat cable from MAIN PCB), be sure to solder-bridge where indicated in the inset (Fig.4-1) to prevent the laser diode from being electrostatically damaged.
  After replacing the pickup assembly, be sure to unsolder the antistatic bridge. Or else the laser diode does not function.
- Before servicing the pickup ass'y be sure to prevent electrostatic-induced destruction by grounding not only test equipment in use but also yourself as shown in Fig.4-2.
  ※Electrostatic charge drastically shortens the operating life of the laser diode or possibly results in its destruction.
- During the transportation, mounting and dismounting of the assembly, support with your fingers at points A and B as shown in Fig.4-3.
  Be particularly careful not to touch the actuator, photosensor and LD plate and do not apply force to them.
- Don't touch the plated portion of the flat cable end directly with fingers.
- Use care not to break the flat cable.
- Soldering must be done quickly at less than 30W, 320 ℃.
- Don't disassemble the pickup ass'y.
- Don't apply shock to the pickup ass'y.
- Don't place the assembly in a place subject to exessive dust, heat or moisture.

"ピックアップ ASSY " の取り扱い

1.ピックアップ ASSY の交換

- ピックアップ ASSY を外すとき（ピックアップのフラットケーブルをメイン PCB から外す場合も含む）は，レーザー・ダイオードの静電破壊防止のため，必ず斜線部分 (Fig.4-1) を半田ブリッジしてから作業をしてください．また，取り付ける場合も，取り付けた後に半田ブリッジを外してください．
  半田ブリッジをしたままではレーザー・ダイオードは動作しません．
- ピックアップ ASSY を取り扱う場合は，測定器などに確実なアースを取ると共に，人体アースを行い，静電破壊を十分防止してください．(Fig.4-2 参照)
  ※レーザー・ダイオードは，静電気が加わると寿命が著しく低下したり，または破損しますので十分注意してください．
- 取り付け，取り外し，持ち運びの際は，Fig.4-3 のA部とB部で支えてください．特にアクチェータ，光検出部，LD プレート部は，手を触れたり力を加えたりしないでください．
- フラット・ケーブル先端のメッキ部分には直接指を触れないでください．
- フラット・ケーブルは折れやすいので十分注意をして作業してください．
- 半田コテは 30 W，320 ℃以下を使用し，すばやく処理してください．
- ピックアップ ASSY 本体の調整および分解などはしないでください．
- ピックアップ ASSY に落下・衝撃はくわえないでください
- ゴミ・ホコリなどの発生する場所，高温・多湿の場所は避けてください．

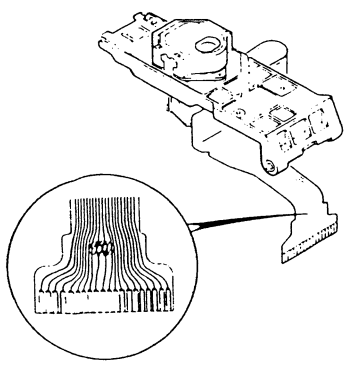


Fig.4-1

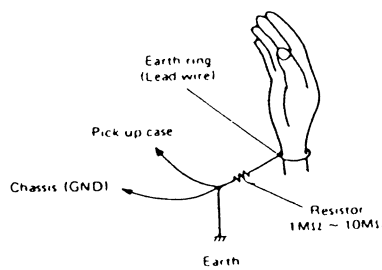


Fig.4-2

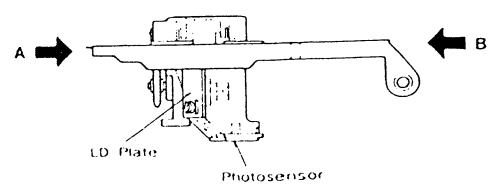


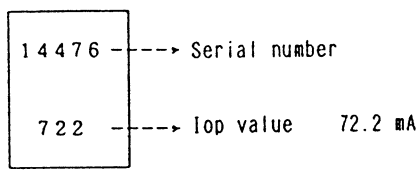
Fig.4-3

2. Laser diode check
〔Iop (Intensity Optimum) check 〕

- To check the laser diode is not electrostatically damage, put the player into play, measure voltage at both ends of R 31 (22 ohms) on the MAIN PCB, calculate to obtain amperage value (I=Vr 31/22). If the obtained value is 10 mA or much higher than the Iop value indicated on the pickup ass'y, it is possible that the laser diode is defective.
※Use care to prevent static electricity destroying the laser diode.

※ Reading the indication on the pickup

(Example)



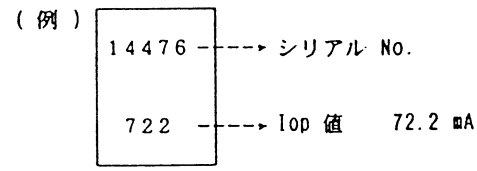
- Don't touch laser diode pins, LD plate, circuit components, directly with fingers.

2.レーザー・ダイオードの破損チェック
〔Iop (Intensity Optimum) 値確認〕

- レーザー・ダイオード破損の確認は，CD プレーヤーをプレイ状態にし，MAIN PCB の R 31 (22Ω) の両端に DC ボルト・メーターを接続します．その両端の電圧から電流換算(I = R 31 の電圧 ／ 22) をし，その値がピックアップ ASSY に記入されている Iop 値より 10 mA 以上増加していないことを確認します．
(増加の場合は破損している可能性があります．)
※静電破壊に十分注意すること．

※ピックアップ添付シールの読み方

(例)



3. Objective

- Laser beams are similar to infrared rays. Don't look at the beams directly and keep your eyes at least 30 cm away from them.
- Don't touch the objective with fingers.
- If objective becomes dirty, playback will deteriorate.
To clean the objective, moisten a good cleaning tissue, such as made by KODAK, in isopropyl alcohol and wipe the objective gently. Wipe off any excess fluid with a dry cleaning tissue.

3.対物レンズについて

- レーザー光は近赤外線の為目視は困難です．目の安全の為目をレンズから 30 cm 以上離してください．
- レンズには手を触れないでください．
- レンズに汚れが付くと再生能力が低下しますので，次のように清掃してください．
レンズ・クリーニング・ペーパー (KODAK社製など) に，イソプロピール・アルコール (I.P.A.) を浸して清掃をし液が残らないように必ず拭き取ってください．

4-1 Servo Adjustment

- Test Disc : YEDS-18
- Adjustment points : MAIN PCB (Fig.4-4)

4-1 サーボ調整

- テスト・ディスク : YEDS-18
- 調整箇所 : MAIN PCB (Fig.4-4)

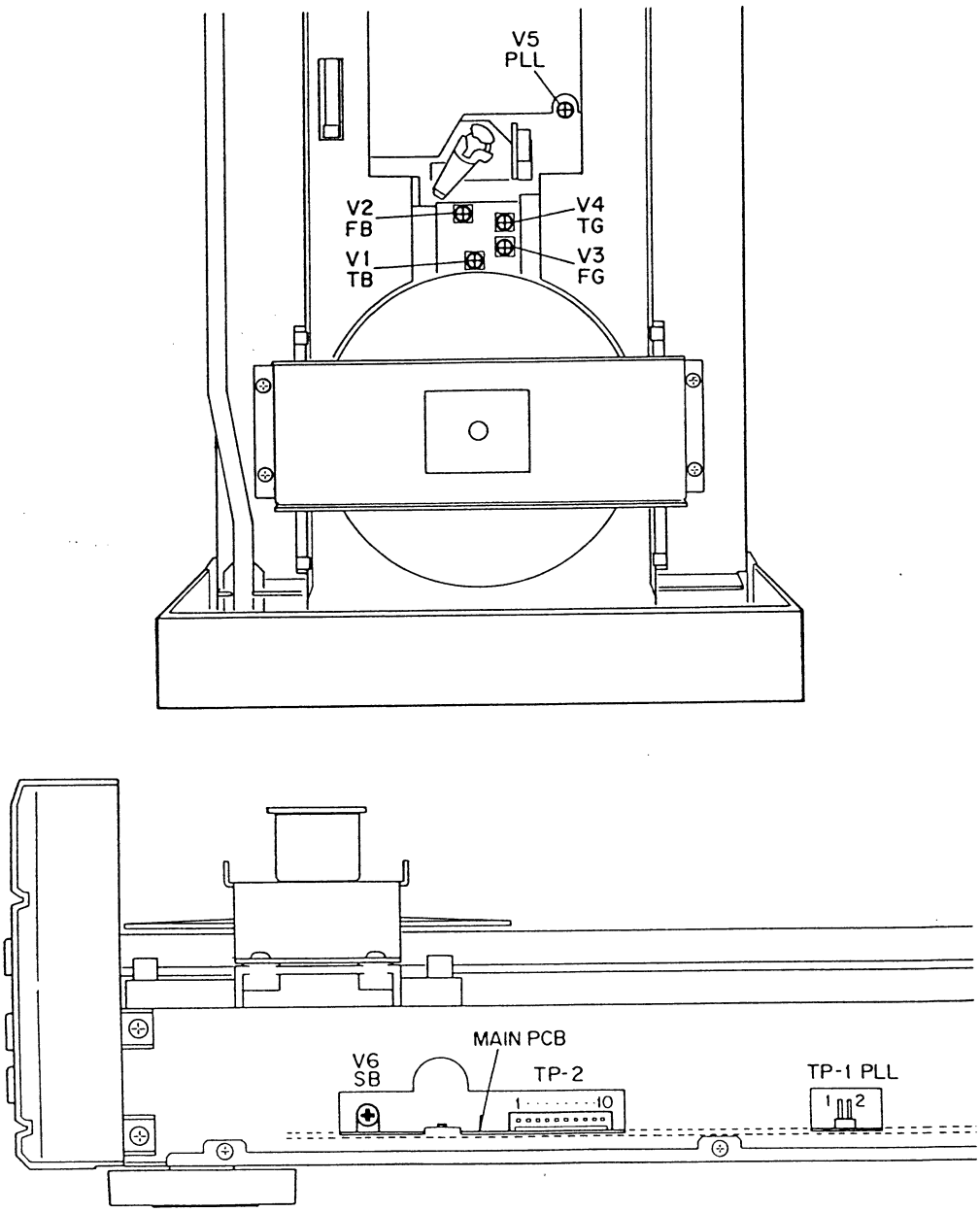


Fig.4-4 Adjustment location

4-1-1 Pickup actuator operation check

1) Turn the power on and, when the pickup assembly reaches the end of its inward travel, check to see that the pickup actuator moves up and down three times while the objective is bright red.

4-1-1 ピックアップ・アクチェータ動作チェック

1) 電源 ON 時，ピックアップ ASS'y が最内周へ移動後，レンズが赤色発光しながらピックアップ・アクチェータが3回上下動すること．

4-1-2 PLL frequency adjustment

1) Open the disc tray. Connect a frequency counter between TP-1 pin 2 and the chassis (GND). (Use a oscilloscope probe with x10 sensitivity with the frequency counter).
2) Connect TP-2 pin 10 (EFM) to TP-2 pin 9 (DGND), and adjust V5 (PLL) for a counter reading of 4.32 ± 0.05 MHz.
(Perform adjustment after several seconds have elapsed and the frequency becomes stable.)

4-1-2 PLL 周波数調整

1) トレーをオープンした状態で TP-1 の 2 番ピンと筐体 (GND) 間に周波数カウンターを接続する．
（周波数カウンターのプローブはオシロスコープ用のプローブを x10 にて使用．）
2) TP-2 の 10 番ピン (EFM)を 9 番ピン (DGND) に落とし 4.32 ± 0.05 MHz になるよう V5 (PLL) を調整する．
（数秒後，周波数が安定してから調整する．

4-1-3 Sled balance adjustment

1) Close the disc tray with no disc loaded. Adjust V6 (SB) for 0 V potential between TP-2 pin 1 (SD) and TP-2 pin 2 (GND).

4-1-3 スレッド・バランス調整

1) ディスクなしでトレーを閉じた後 TP-2 の1番ピン (SD) と 2 番ピン (GND)間の電位差が 0V になるよう V6 (SB) を調整する．

4-1-4 Tracking balance adjustment

1) Set the test disc (YEDS-18) and close the disc tray.
2) Connect TP-2 pin 6 (TE2) to TP-2 pin 5 (AGND).
3) While pressing the PLAY button repeatedly, adjust V1 (TB) so that the tracking error waveform at TP-2 pin 7 (TE1) swings symmetrically centered around 0V.

4-1-4 トラッキング・バランス調整

1) テスト・ディスク (YEDS-18) をセットしトレーを閉じる
2) TP-2 の 6番ピン (TE2) を 5番ピン (AGND) に落とす．
3) プレイ釦を繰り返し押しながら TP-2 の 7番ピン (TE1)のトラッキング・エラーの波形が 0V を中心に振れるよう V1 (TB) を調整する．

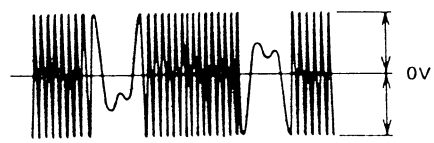


Fig. 4-5

4-1-5 Focus balance adjustment

1) Set the player to the play mode. Connect the probe of jitter meter to TP-2 pin 10 (EFM) and the chassis (GND). Adjust V2 (FB) so that the jitter is optimized at 30 nsec or less.

4-1-6 Focus offset check

1) After adjusting the focus balance, stop the player. Check for an offset voltage of 50 mV or less at TP-2 pin 8 (FEO).
If reading values are out of spec. adjust again V2 (FB).
CAUTION : If V2 is readjusted, check the jitter value again.

4-1-7 Focus gain adjustment

1) Plug into TP-2 pin 3 (FE2) a 1.2 kHz / 200 mVp-p signal coming from external oscillator via 4.7 kohm resistor.
2) Adjust V3 (FG) for 90° out of phase between TP-2 pin 4 (FE1) and external oscillator.

4-1-5 フォーカス・バランス調整

1) TP-2 の 10 番ピン (EFM) と筐体 (GND)間にジッター・メーターのプローブを接続し，ジッター値が 30 nsec 以下かつ最良になるよう V2 (FB) で調整する．

4-1-6 フォーカス・オフセット確認

1) フォーカス・バランス調整後 STOP 状態にして TP-2 の 8 番ピン (FEO) のオフセット電圧が 50 mV 以下であることを確認する．

もし規格に入らない場合は再度 V2 (FB)を調整する．
注意 : V2 を調整した場合は，再度ジッター値を確認すること．

4-1-7 フォーカス・ゲイン調整

1) 外部 OSC より 4.7 kΩ の抵抗を介して 1.2kHz/200mVp-p の信号を TP-2 の 3番ピン (FE2) に入力する．
2) TP-2 の 4番ピン (FE1) と外部 OSC との位相が 90° になるよう V3 (FG) を調整する．

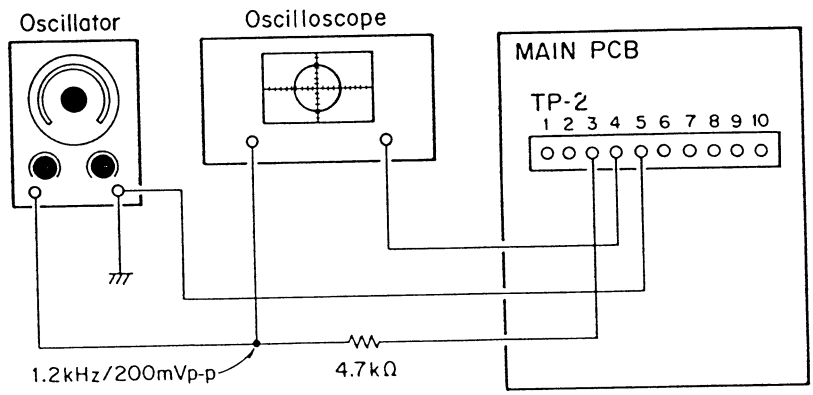


Fig. 4-6

4-1-8 Tracking gain adjustment

1) Plug into TP-2 pin 6 (TE2) a 1.2 kHz / 200 mVp-p signal coming from external oscillator via 4.7 kohm resistor.
2) Adjust V4 (TG) for 90° out of phase between TP-2 pin 7 (TE1) and external oscillator.

4-1-8 トラッキング・ゲイン調整

1) 外部 OSC より 4.7 kΩ の抵抗を介して 1.2kHz/200mVp-p の信号を TP-2 の 6番ピン (TE2) に入力する.
2) TP-2 の 7番ピン (TE1) と外部 OSC との位相が 90° になるよう V4 (TG) を調整する.

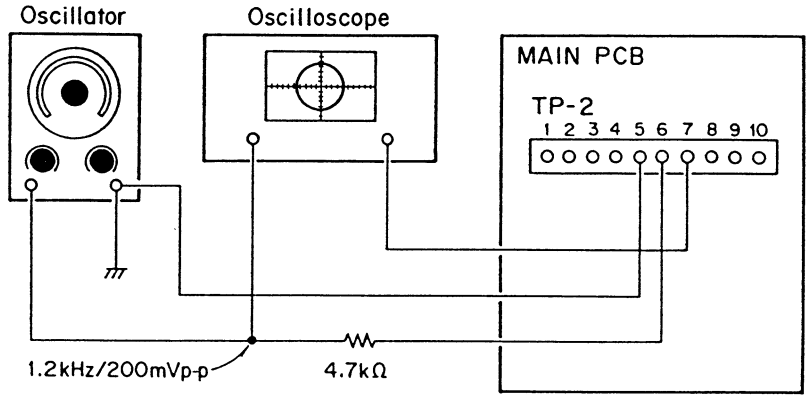
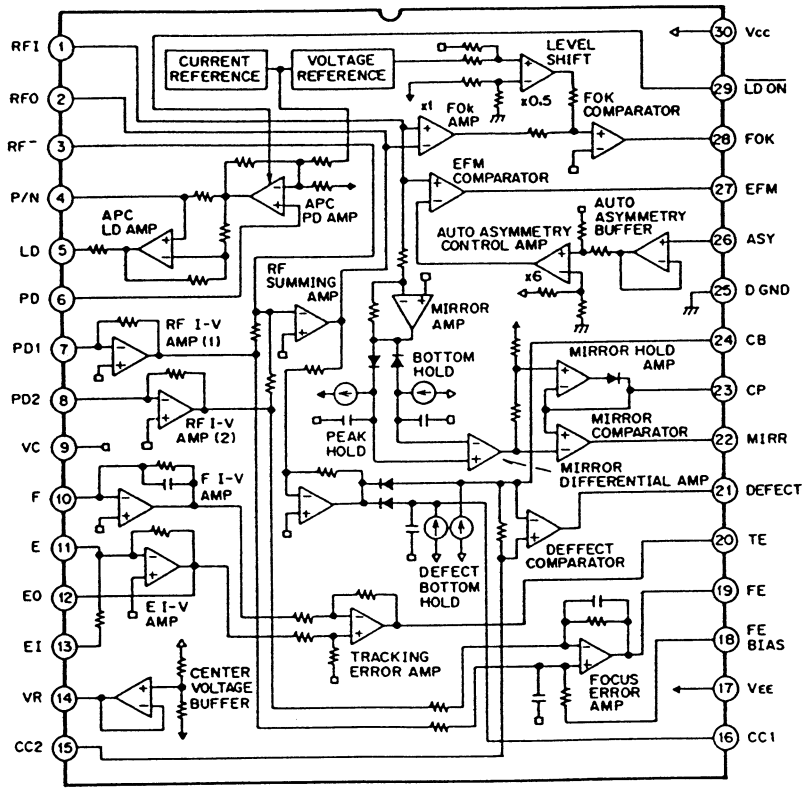


Fig. 4-7

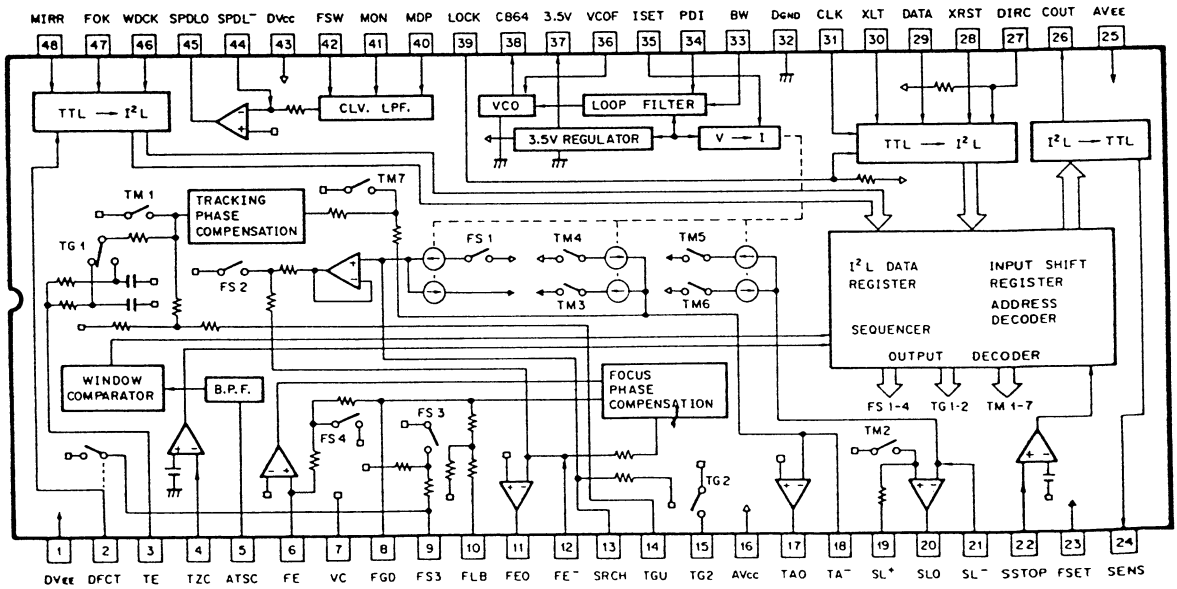
5 IC BLOCK DIAGRAMS

ICブロック・ダイヤグラム

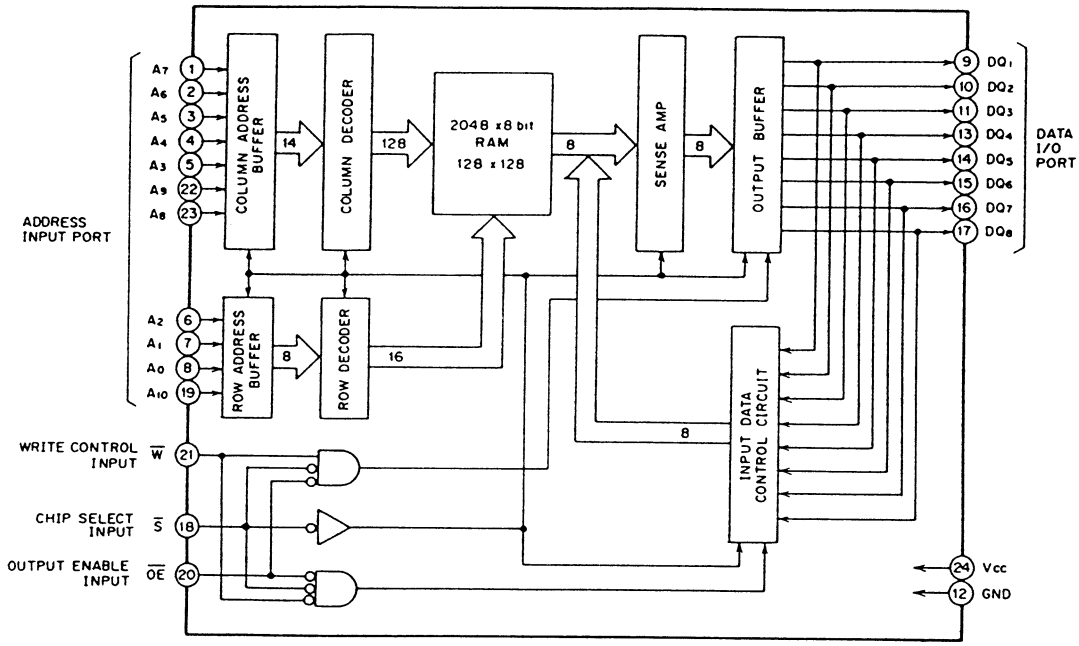
CXA1081S



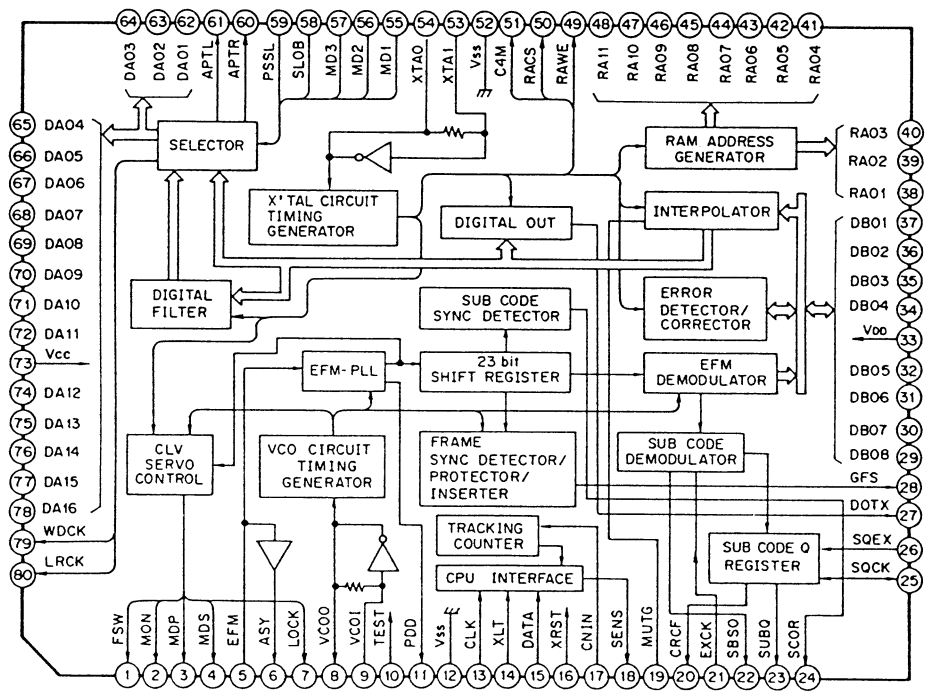
CXA1082BS



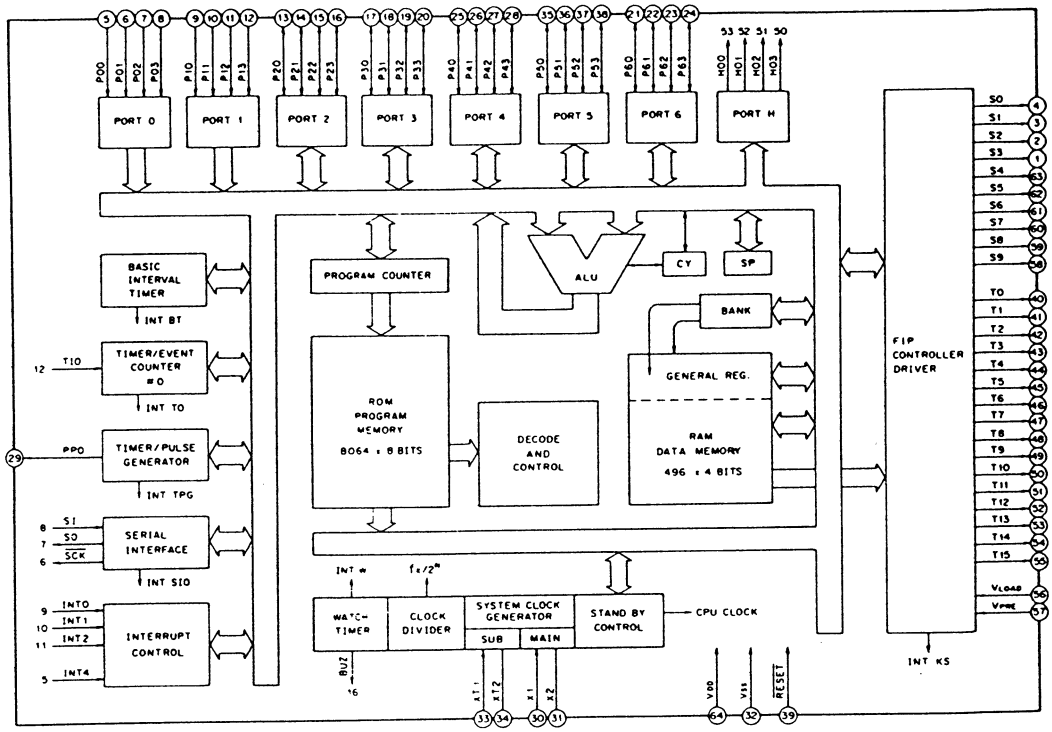
CXK5816M-15L



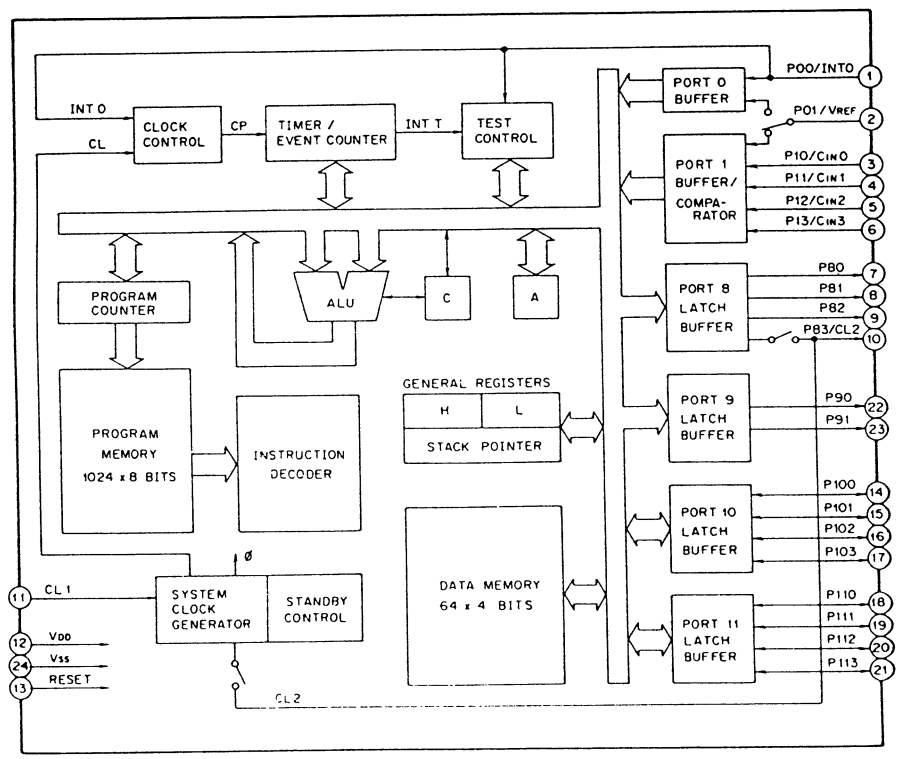
CXD1125



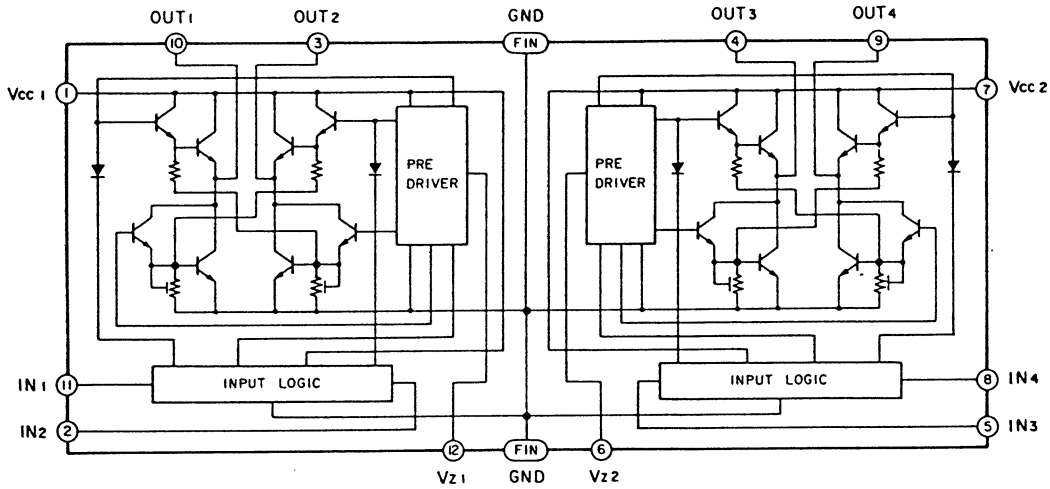
μPD75208

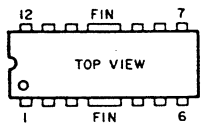


μPD7566CS



LB1649

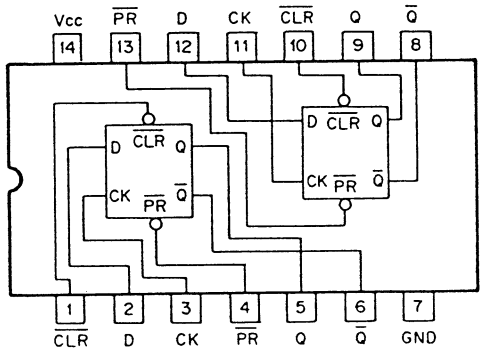




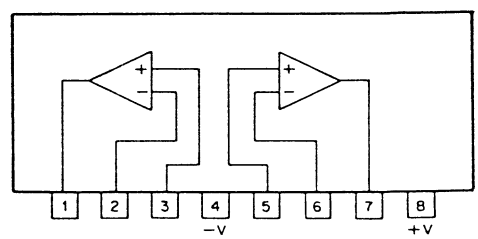
IN1	IN2	OUT1	OUT2
0	0	L	L
1	0	H	L
0	1	L	H
1	1	L	L

IN3	IN4	OUT3	OUT4
0	0	L	L
1	0	H	L
0	1	L	H
1	1	L	L

TC74HC74P



M5218L



PARTS LISTS SECTION

NOTES

* Parts marked with * require longer delivery time.
* ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components – refer to the TEAC Parts List and ensure exact replacement.
* PC boards shown viewed from parts side.

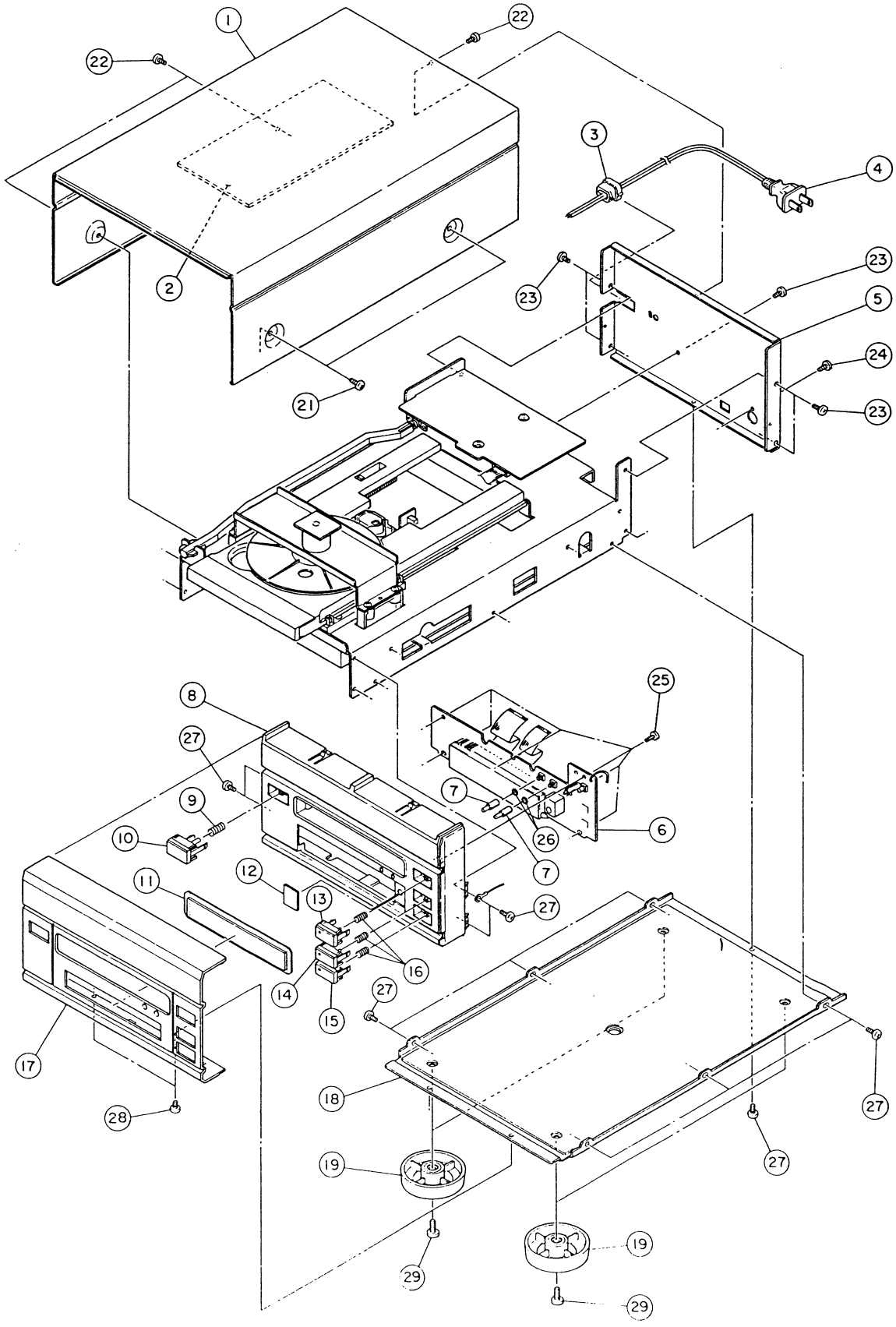
注意

1. ＊印の部品は納期か若干かかります。あらかじめご了承ください。
2. ⚠印は安全規格重要部品です。交換するときは必ずティアック指定の部品を使用して下さい。
3. プリント基板図は部品面が示されています。

6 EXPLODED VIEWS AND PARTS LIST

分解図とパーツ・リスト

EXPLODED VIEW - 1



EXPLODED VIEW-1

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1- 1	*5801203900	BONNET	
1- 2	*5800893200	SHEET, CUSHION	
1- 3	*5317003400	BUSHING 2271	
1- 4	⚠*5350015400	CORD, AC [J] OFC 1.5M 12-4015	
	⚠*5350010700	CORD, AC [US,C] SPT-2	
	⚠*5350010800	CORD, AC [GE] SPT-1	
	⚠*5350011700	CORD, AC [E] CLASS-2	
1- 5	*5801203400	PANEL, REAR	
	*5801285800	PANEL, REAR [GE]	
1- 6	*5200269810	FRONT PCB ASSY	Ref.pages 21 & 23
1- 7	5801171500	BUTTON, SKIP	
1- 8	*5801204101	PANEL, SUB	
1- 9	*5801070200	SPRING, POWER	
1-10	5801072400	KNOB, POWER	
1-11	*5801252600	ACRYLIC WINDOW ASSY	
1-12	*5800851200	FILTER, SENSOR	
1-13	5801068100	OPEN/CLOSE KNOB ASSY	
1-14	5801067900	PLAY KONB ASSY	
1-15	5801068200	PAUSE KNOB ASSY	
1-16	*5801070100	SPRING, KNOB	
1-17	*5801203300	PANEL, FRONT	
1-18	*5801203800	CHASSIS, BOTTOM	
1-19	5801252400	FOOT ASSY	
1-21	*5800612400	SCREW, M3X8 (BLK)	
1-22	*5783613008	SCREW, B.CT M3X8 (BLK NI)	
1-23	*5783693006	SCREW, BIND S-TITE M3X6 (BLK NI)	
1-24	*5783543008	SCREW, BIND P-TITE M3X8 (NI BLK)	
1-25	*5783603006	SCREW, BIND P-TITE M3X6	
1-26	*5785332000	WASHER, POLY. 2.4X5X0.5T CUT	
1-27	*5783033006	SCREW, BIND S-TITE M3X6	
1-28	*5783692606	SCREW, BIND S-TITE M2.6X6 (BLK NI)	
1-29	*5783034006	SCREW, BIND S-TITE M4X6	

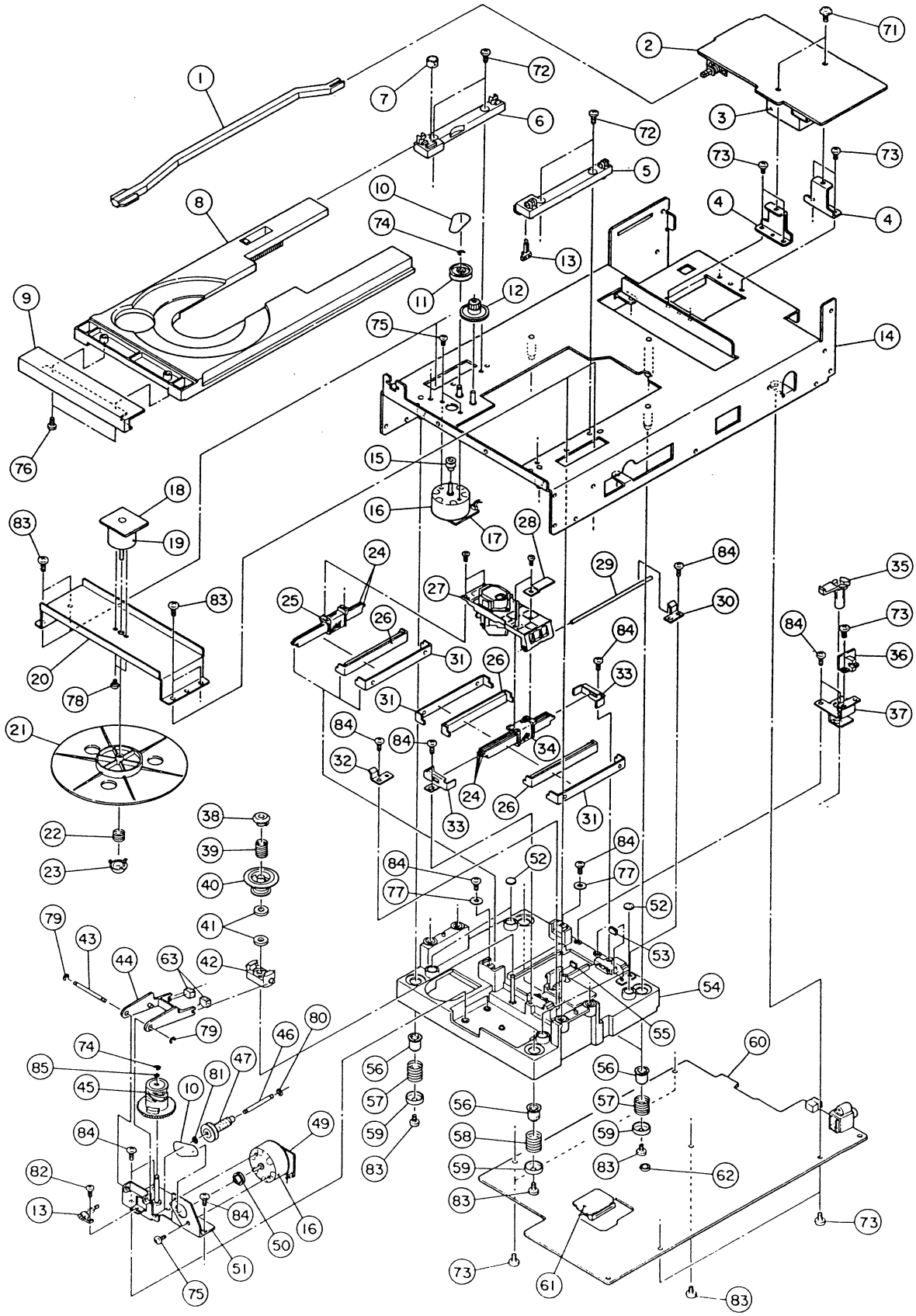
INCLUDED ACCESORIES

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	*5744074400	REMOTE CONTROL UNIT RC-342	
	*5347006900	BATTERY [J]	
	*5347007000	BATTERY [EXCEPT J]	
	*5350512000	CORD, PIN (75 OHM)	
	*5801292100	PLATE, TRANSIT LOCK	
	*5700111200	OWNER'S MANUAL [J]	
	*5700111300	OWNER'S MANUAL [EXCEPT J]	

Parts marked with *require longer delivery time.

[J]:JAPAN [US]:U.S.A. [C]:CANADA
[E]:EUROPE [GE]:GENERAL EXPORT

EXPLODED VIEW – 2



EXPLODED VIEW-2

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
2- 1	*5801042000	ROD	
2- 2	*5200275700	POWER SUPPLY PCB ASSY [J]	Ref.pages 22 & 23
	*5200275710	POWER SUPPLY PCB ASSY [US,C]	Ref.pages 22 & 23
	*5200275720	POWER SUPPLY PCB ASSY [GE]	Ref.pages 22 & 23
	*5200275730	POWER SUPPLY PCB ASSY [E]	Ref.pages 22 & 23
2- 3	⚠ 5320054600	POWER TRANSFORMER [J]	
	⚠ 5320054700	POWER TRANSFORMER [US,E,A,GE]	
	⚠ 5320057100	POWER TRANSFORMER [T-C]	
2- 4	*5801202300	ANGLE, TRANSFORMER	
2- 5	*5801203000	GUIDE (R)	
2- 6	*5801203100	GUIDE (L)	
2- 7	*5801132601	CUSHION	
2- 8	*5801203601	TRAY	
2- 9	*5801202500	PANEL, TRAY	
2-10	5800979500	BELT, LOADING	
2-11	5800979400	GEAR, (B)	
2-12	5800979300	GEAR, (A)	
2-13	5301754000	SWITCH, LEAF LSC-1220-1AU	
2-14		MAIN CHASSIS ASSY	
2-15	5800979200	PULLEY, MOTOR	
2-16	5370009200	MOTOR, DC RF-500TB	
2-17	*5200286400	T-MOTOR PCB ASSY	Ref.pages 21 & 23
2-18	*5200275600	MOTOR PCB ASSY	Ref.pages 21 & 23
2-19	5370008800	MOTOR, DC RF-310T	
2-20	*5801202902	BRACKET, MOTOR	
2-21	5801202800	TURNTABLE	
2-22	5801202400	SPRING	
2-23	5801201400	RING (B), CENTER	
2-24	*5801059400	YORK (C)	
2-25	5801078300	COIL (S)	
2-26	*5801178900	YORK (B) ASSY	
2-27	5347009800	LASER PICKUP ASSY	
2-28	*5801164700	SHUTTER	
2-29	*5801058900	SHAFT, GUIDE	
2-30	*5801059100	HOLDER (R), SHAFT	
2-31	*5801059200	YORK (A)	
2-32	*5801059000	HOLDER (F), SHAFT	
2-33	*5801059600	HOLDER, YORK	
2-34	5801078200	COIL (D)	
2-35	*5801164901	ARM, PICKUP LOCK	
2-36	*5200275500	SENSER PCB ASSY	Ref.pages 21 & 23
2-37	*5801164800	BRACKET, LOCK ARM	
2-38	*5801201300	RING (A), CENTER	
2-39	*5801096200	SPRING (G), PRESSURE	
2-40	*5801201202	CLAMPER	
2-41	5730033400	MAGNET REC-26A	
2-42	*5801201100	HOLDER	
2-43	*5801201800	SHAFT (B)	
2-44	*5801201500	ARM, LIFT	
2-45	*5801202700	CAM, SHIRINDER	
2-46	*5801201700	SHAFT (A)	
2-47	*5800669800	WORM ASSY	
2-48	Vacant		
2-49	*5200286500	C-MOTOR PCB ASSY	Ref.pages 21 & 23
2-50	5801170200	PULLEY, MOTOR	
2-51	*5801201600	BASE, CLAMPER	
2-52	*5801095900	WASHER, RUBBER	
2-53	*5801288300	STOPPER (B)	
2-54		BASE, MECHANISM	
2-55	*5801288200	STOPPER (A)	

[J]:JAPAN [US]:U.S.A. [C]:CANADA
[E]:EUROPE [GE]:GENERAL EXPORT

Parts marked with *require longer delivery time.

EXPLODED VIEW-2

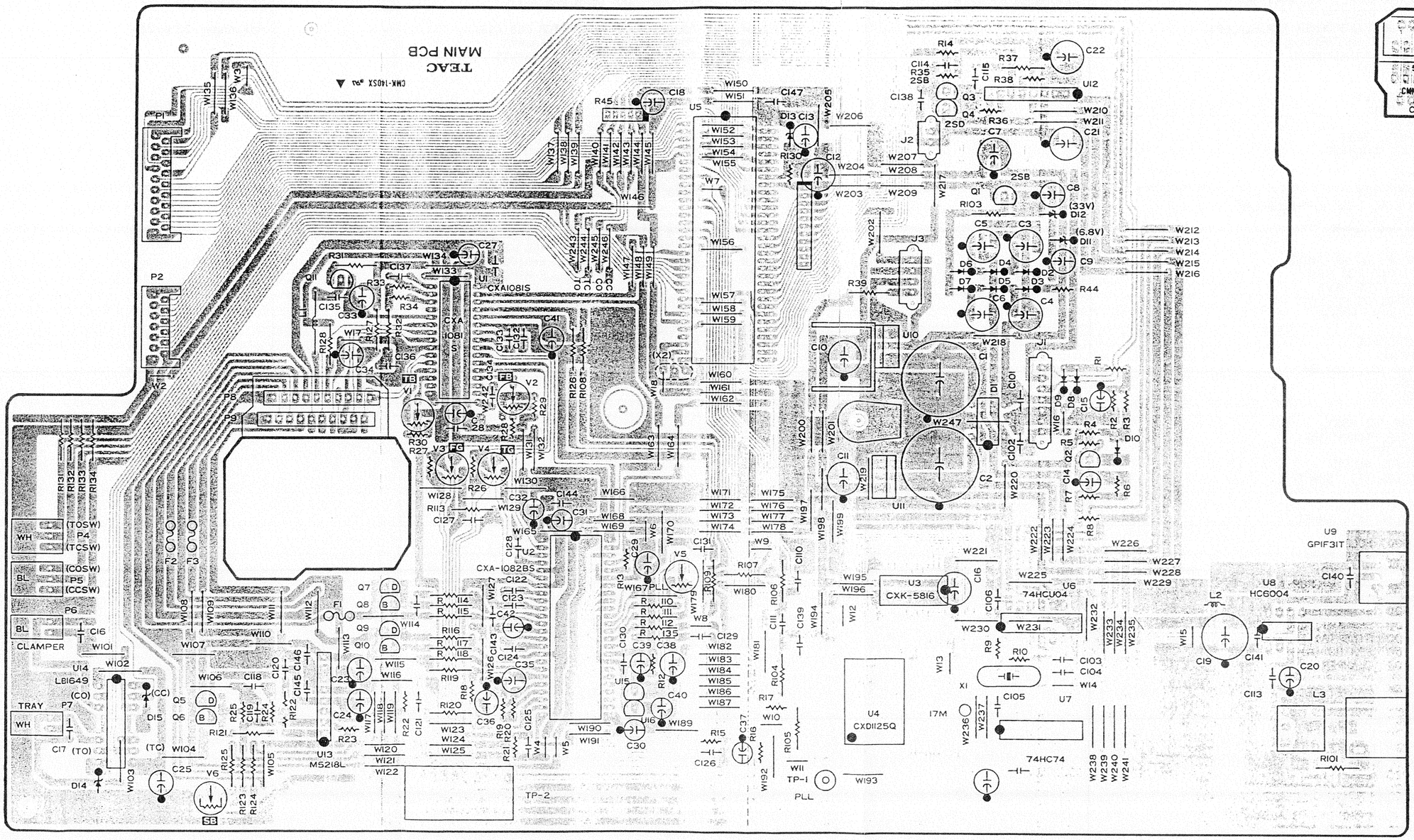
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
2-56	*5800846500	RUBBER, BUSH	
2-57	*5800874901	SPRING B, FLOATING	
2-58	*5800875001	SPRING C, FLOATING	
2-59	*5800846700	SUPPORT, SPRING	
2-60	*5200275300	MAIN PCB ASSY	Ref.pages 20 & 22
2-61	*5200275400	CONNECTOR PCB ASSY	Ref.pages 20 & 23
2-62	*5801170100	GUIDE, CLAMPER	
2-63	*5801308800	CUSHION, 5X8XT5	
2-71	*5783074008	SCREW, S-TITE PAN M4X8	
2-72	*5783033008	SCREW, BIND S-TITE M3X8	
2-73	*5783033006	SCREW, BIND S-TITE M3X6	
2-74	*5786003000	WASHER, E-RING E-3 (JIS)	
2-75	*5780002603	SCREW, BINDING HEAD M2.6X3	
2-76	*5783543008	SCREW, BIND P-TITE M3X8 (NI BLK)	
2-77	*5785023200	WASHER, 3X10X0.5T	
2-78	*5780002003	SCREW, BIND M2X3	
2-79	*5786002000	WASHER, E-RING, E-2 (JIS)	
2-80	*5786001500	WASHER, E-RING E-1.5 (JIS)	
2-81	*5785302400	WASHER, POLY. 2.1X5X025T	
2-82	*5780002006	SCREW, BIND M2X6	
2-83	*5780003006	SCREW, BIND M3X6	
2-84	*5783533008	SCREW, BIND M3X8 (BLK NI)	
2-85	*5785314100	WASHER, POLY. 4X8X0.5T	

Parts marked with *require longer delivery time.

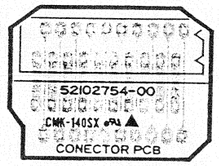
7 PC BOARDS AND PARTS LIST

基板図とパーツ・リスト

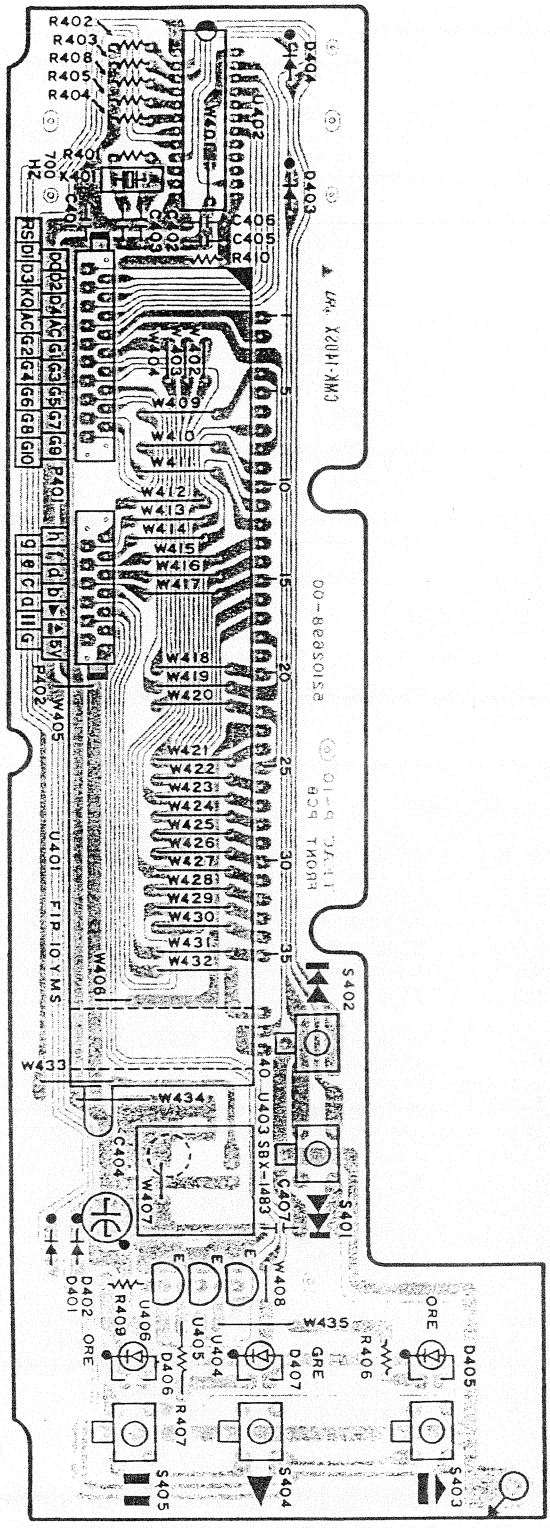
MAIN PCB ASSY



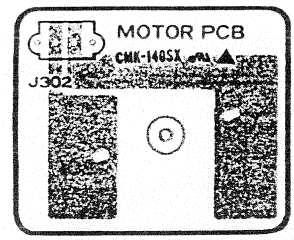
CONNECTOR PCB ASSY



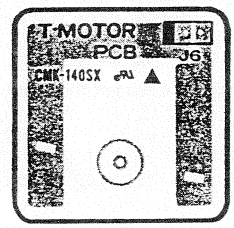
FRONT PCB ASSY



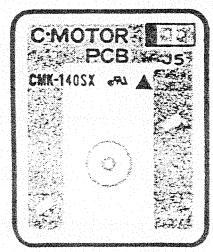
MOTOR PCB ASSY



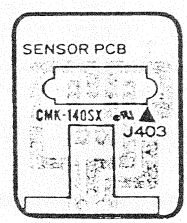
T. MOTOR PCB ASSY



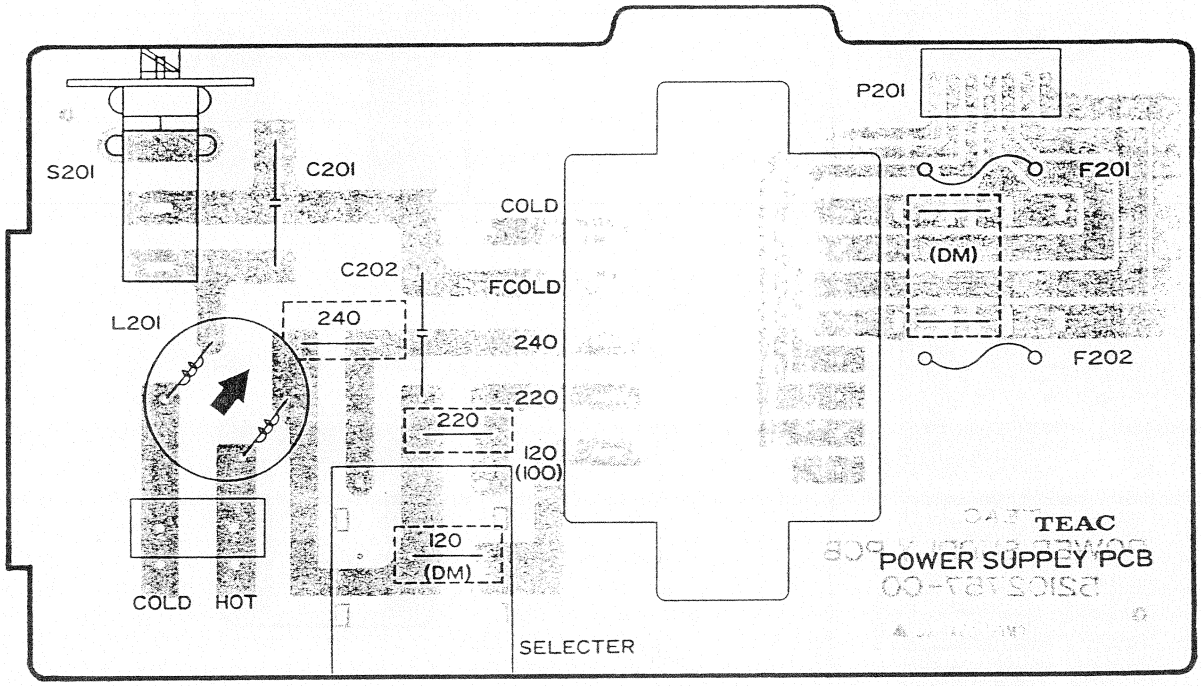
C. MOTOR PCB ASSY



SENSOR PCB ASSY



POWER SUPPLY PCB ASSY



As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.

標準の抵抗：コンデンサーは省略してあります。回路図を参照してください。

MAIN PCB ASSY

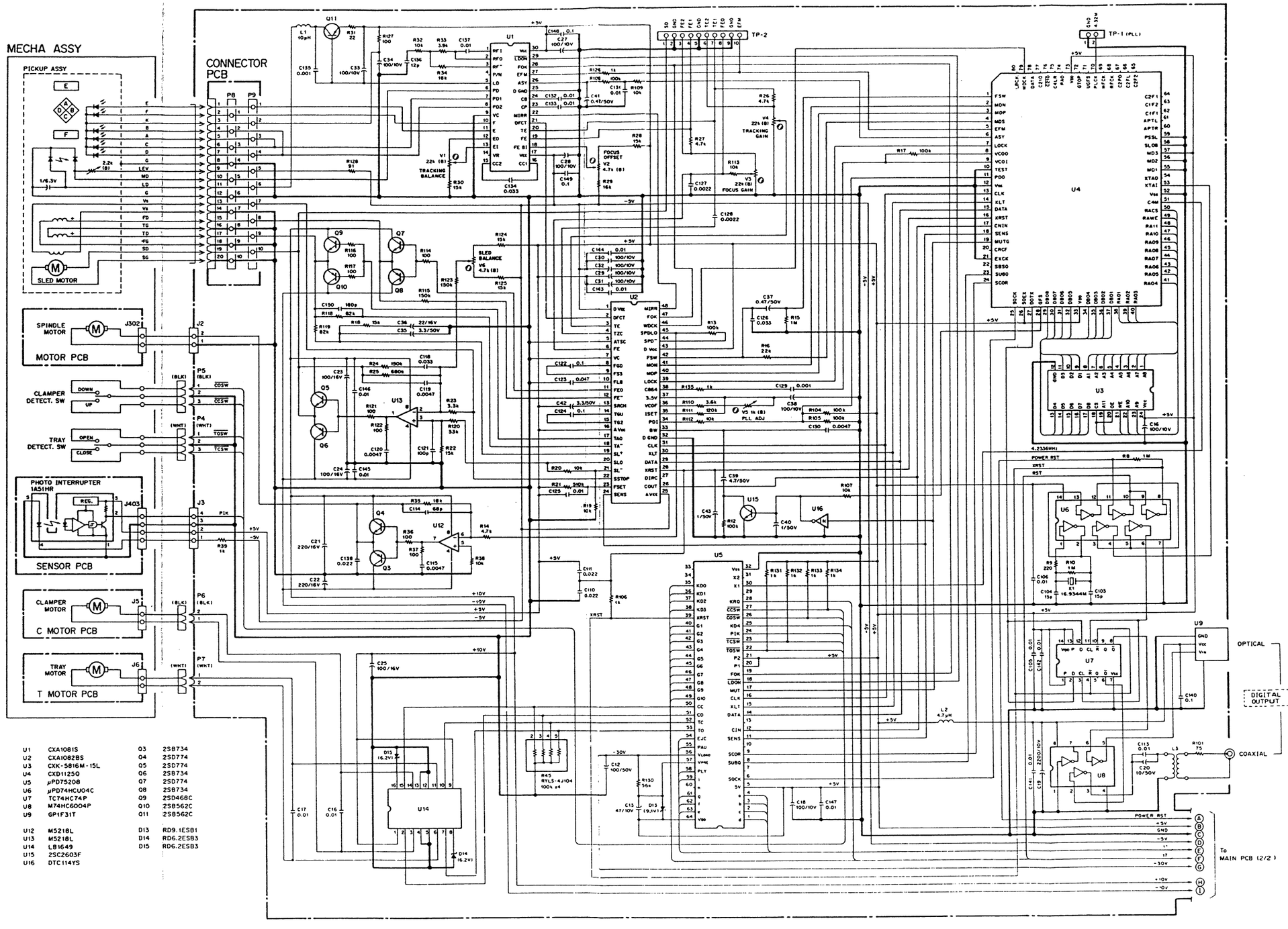
REF.NO.	PARTS NO.	DESCRIPTION
	*5200275300	MAIN PCB ASSY
	*5210275300	MAIN PCB
	5330512700	JACK, PIN IP YKB11-0400
	5800990100	HEAT SINK
	5555590000	PLATE (A), EARTH
C001,002	⚠5260428510	C., ELEC. 6800UF/16V
C013	5260423320	C., ELEC. 47UF/10V
C037	5260420920	C., ELEC. 0.47UF/50V
C103,104	5173447000	C., CERAMIC 15PF/50V
C106	5263166723	C., METAL 0.010UF/50V
C150	5263106020	C., POLY. 180PF/100V
D001	⚠5228010700	SILICON STACK, S1WB8(A)20
D002-007	5224016420	DIODE, S5688G
D008-010	5224015020	DIODE, 1SS133T-77
D011	5224585821	DIODE, ZENER RD6.2ESB3
D012	5224592921	DIODE, ZENER RD33ESB2
D013	5224587221	DIODE, ZENER RD9.1ESB1
D014,015	5224585821	DIODE, ZENER RD6.2ESB3
L001	5286026800	COIL, 10UH SP-0406-100K-6
L002	5286033520	COIL, CHOKE 4.7UH (LAP2T) VT

MAIN PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
L003	5320046300	TRANS, PLL TC1027-04
P001	5336299900	SOCKET CONN., 00-8370-197
P002	5336299300	SOCKET CONN., 00-8370-137
P004	5336128300	PLUG, CONN. 3P WHT
P005	5336141300	PULG, CONN. 8263-0311 BLK
P006	5336141200	PULG, CONN. 8263-0211 BLK
P007	5336128200	PLUG, CONN. 8263-0211 WHT
P008,009	5122362000	PULG, CONN. 3022-10AD
Q001	5230508900	TRANSISTOR, 2SB772P
Q002	5230780920	TRANSISTOR, 2SC2603F
Q003	5230510000	TRANSISTOR, 2SB734
Q004,005	5231762900	TRANSISTOR, 2SD774
Q006	5230510000	TRANSISTOR, 2SB734
Q007	5231762900	TRANSISTOR, 2SD774
Q008	5230510000	TRANSISTOR, 2SB734
Q009	5231761900	TRANSISTOR, 2SD468C
Q010,011	5230509100	TRANSISTOR, 2SB562C
R045	5242125400	R., ARRAY RYLS-4J104
R110	5241065920	R., 3.6K METAL
R114,116	5181458000	R., 100 OHM
R117	5181458000	R., 100 OHM
R124,125	5241067420	R., 15K METAL
TP-1	5122354000	PULG, CONN. 3022-02AD
TP-2	5336129000	PULG, CONN. 8263-1011 WHT
U001	5220441400	IC., CXA-1081S
U002	5220441500	IC., CXA-1082BS
U003	5220054900	IC., CXK5816M-15L
U004	5220062300	IC., CXD1125
U005	5220816800	UCON., UPD75208
U006	5220040900	IC., UPD74HCU04C

Parts marked with *require longer delivery time.

TEAC SCHEMATIC DIAGRAM P-500



U1	CXA1081S	Q3	2SB734
U2	CXA1082BS	Q4	2SD774
U3	CXK-5816M-15L	Q5	2SD774
U4	CXD1125Q	Q6	2SB734
U5	μPD75208	Q7	2SD774
U6	μPD74HCU04C	Q8	2SB734
U7	TC74HC74P	Q9	2SD468C
U8	M74HC6004P	Q10	2SB562C
U9	GP1F31T	Q11	2SB562C
U12	M5218L	D13	RD9.1ESB1
U13	M5218L	D14	RD6.2ESB3
U14	L81649	D15	RD6.2ESB3
U15	2SC2603F		
U16	DTC114YS		

INSTRUCTIONS FOR SERVICE PERSONNEL

BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPLOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

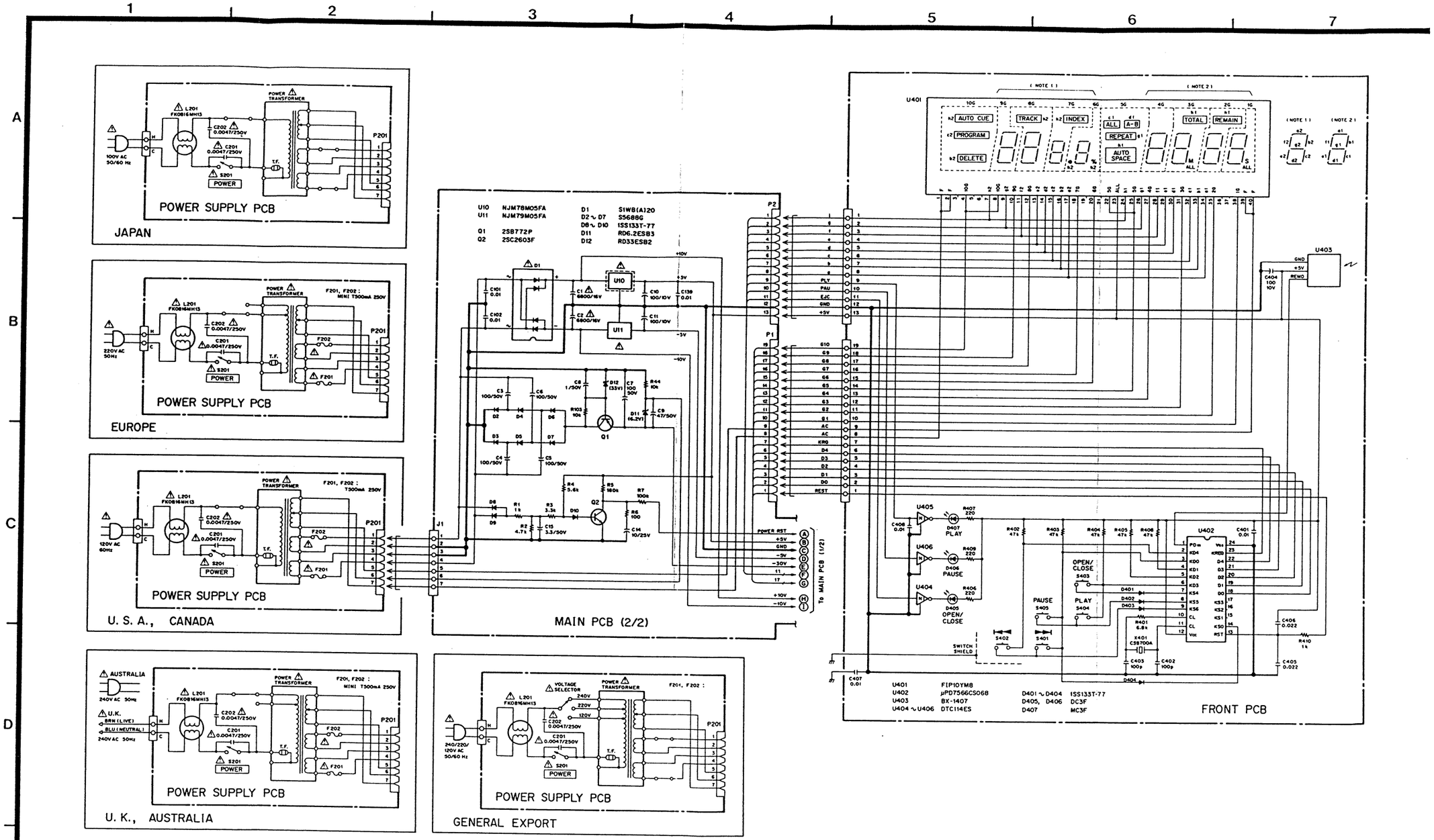
NOTES

1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
2. Capacitor values are in microfarads (p=picofarads).
3. △ Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

注意

1. 抵抗の単位はΩ(k：kΩ、M：MΩ)です。
2. コンデンサの単位はμF(p：pF)です。
3. △ マークのある部品は安全上重要な部品です。必ず指定された交換用部品を使用してください。

CD DRIVE UNIT P-500



INSTRUCTIONS FOR SERVICE PERSONNEL

BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPLOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

NOTES

1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
2. Capacitor values are in microfarads (p=picofarads).
3. ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

注意

1. 抵抗の単位はΩ(k=kΩ, M=MΩ)です.
2. コンデンサの単位はμF(p=pF)です.
3. ⚠マークのある部品は安全重要部品です. 交換するときは必ずティアック指定の部品を使用してください.

CD DRIVE UNIT P-500

MAIN PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
U007	5220040800	IC., TC74HC74P
U008	5220057500	IC., M74HC6004P
U009	5292209800	MODULE, OPTICAL TRANSMITTER GPIF31T
U010	⚠13447943	IC., NJM78M05FA
U011	⚠13447961	IC., NJM79M05FA
U012,013	5220416200	IC., M5218L
U014	5220430200	IC., LB1649
U015	5230780920	TRANSISTOR, 2SC2603F
U016	5232256020	TR., DIGITAL DTC114YS
V001	5280021501	R., TRIMMER 22KB
V002	5280021101	R., TRIMMER 4.7KB H.
V003,004	5280021501	R., TRIMMER 22KB
V005	5280181102	R., TRIMMER 1KB H.
V006	5280211000	R., TRIMMER 4.7KB
X001	5347010900	OSC., CRYSTAL 16.9344MHZ

CONNECTOR PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*5200275400	CONNECTOR PCB ASSY
	*5210275400	CONNECTOR PCB
	5336313000	SOCKET CONN., 5597-20APB

FRONT PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*5200269810	FRONT PCB ASSY
	*5210269800	FRONT PCB
	5730034200	SPACER, LS-15
	5355189200	FLAT CABLE P1.25M19-120
	5355189300	FLAT CABLE P1.25M13-120
	5801180900	FL CUSHION
D401-403	5224015020	DIODE, 1SS133T-77
D404	5224015020	DIODE, 1SS133T-77
D405-407	5225020400	LED, SLH38 DC3F
S401,402	5302106700	SWITCH, TACT B3F-1150
S403-405	5302108500	SWITCH, TACT L9.5
U401	5347009100	DISPLAY ASSY; FIP10YMB
U402	5220810400	IC., UPD7566C
U403	5292209500	MODULE, REMOTE SBX1483-52
U404-406	5232255620	TR.,DIGITAL DTC114ES
X401	5347006500	OSC, CERAMIC CSB700A

MOTOR PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*5200275600	MOTOR PCB ASSY
	*5210275600	MOTOR PCB
	5340000200	HOLDER, WIRE 2P CDP1902

T-MOTOR PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*5200286400	T-MOTOR PCB ASSY
	*5210286400	T-MOTOR PCB
	5370009200	MOTOR, DC RF-500TB

C-MOTOR PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*5200286500	C-MOTOR PCB ASSY
	*5210286500	C-MOTOR PCB
	5370009200	MOTOR, DC RF-500TB

SENSER PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*5200275500	SENSER PCB ASSY
	*5210275500	SENSER PCB
	5228014100	PHOTO INTERRUPTER GP1A51HR

POWER PCB ASSY [E]

REF.NO.	PARTS NO.	DESCRIPTION
	*5200275700	POWER SUPPLY PCB ASSY [J]
	*5200275710	POWER SUPPLY PCB ASSY [US,C]
	*5200275720	POWER SUPPLY PCB ASSY [GE]
	*5200275730	POWER SUPPLY PCB ASSY [E]
	*5210275700	POWER PCB
	⚠5332019900	SWITCH, VOLTAGE SELECTOR FS908E [GE]
	5332015800	HOLDER, FUSE
	5327007200	TERMINAL, 2P LAPPING
C201,202	⚠5267703800	C., SPARK KILLER 4700PF/400V
F201,202	⚠5307036700	FUSE, T-500MA/250V [US,C]
F201,202	⚠5041138000	FUSE, 0.5A/250V (T) [E]
L201	⚠5292806300	FILTER, NOISE FKOB16MH13
P201	5336259700	PULG CONN., 7P 52012-0710
S201	⚠5300051900	SWITCH, PUSH

Parts marked with *require longer delivery time.

[J]:JAPAN [US]:U.S.A. [C]:CANADA
[E]:EUROPE [GE]:GENERAL EXPORT

P-500

TEAC®

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